#### § 135.395

weight that would allow a full stop landing within 60 percent of the effective length of the most suitable runway at the destination airport; and

- (2) Is greater than the weight allowable if the landing is to be made on the runway—
- (i) With the greatest effective length in still air; and
- (ii) Required by the probable wind, taking into account not more than 50 percent of the headwind component or not less than 150 percent of the tailwind component.
- (b) For the purpose of this section, it is assumed that—
- (1) The airplane passes directly over the intersection of the obstruction clearance plane and the runway at a height of 50 feet in a steady gliding approach at a true indicated airspeed of at least 1.3  $\rm V_{so}$ ;
- (2) The landing does not require exceptional pilot skill; and
- (3) The airplane is operating in standard atmosphere.

# § 135.395 Large nontransport category airplanes: Landing limitations: Alternate airports.

No person may select an airport as an alternate airport for a large nontransport category airplane unless that airplane (at the weight anticipated at the time of arrival), based on the assumptions in §135.393(b), can be brought to a full stop landing within 70 percent of the effective length of the runway.

### § 135.397 Small transport category airplane performance operating limitations.

- (a) No person may operate a reciprocating engine powered small transport category airplane unless that person complies with the weight limitations in §135.365, the takeoff limitations in §135.367 (except paragraph (a)(3)), and the landing limitations in §§135.375 and 135.377.
- (b) No person may operate a turbine engine powered small transport category airplane unless that person complies with the takeoff limitations in §135.379 (except paragraphs (d) and (f)) and the landing limitations in §§135.385 and 135.387.

#### § 135.398 Commuter category airplanes performance operating limitations.

- (a) No person may operate a commuter category airplane unless that person complies with the takeoff weight limitations in the approved Airplane Flight Manual.
- (b) No person may take off an airplane type certificated in the commuter category at a weight greater than that listed in the Airplane Flight Manual that allows a net takeoff flight path that clears all obstacles either by a height of at least 35 feet vertically, or at least 200 feet horizontally within the airport boundaries and by at least 300 feet horizontally after passing the boundaries.
- (c) No person may operate a commuter category airplane unless that person complies with the landing limitations prescribed in §§135.385 and 135.387 of this part. For purposes of this paragraph, §§135.385 and 135.387 are applicable to all commuter category airplanes notwithstanding their stated applicability to turbine-engine-powered large transport category airplanes.
- (d) In determining maximum weights, minimum distances and flight paths under paragraphs (a) through (c) of this section, correction must be made for the runway to be used, the elevation of the airport, the effective runway gradient, and ambient temperature, and wind component at the time of takeoff.
- (e) For the purposes of this section, the assumption is that the airplane is not banked before reaching a height of 50 feet as shown by the net takeoff flight path data in the Airplane Flight Manual and thereafter the maximum bank is not more than 15 degrees.

[Doc. No. 23516, 52 FR 1836, Jan. 15, 1987]

## §135.399 Small nontransport category airplane performance operating limitations.

(a) No person may operate a reciprocating engine or turbopropeller-powered small airplane that is certificated under §135.169(b) (2), (3), (4), (5), or (6) unless that person complies with the takeoff weight limitations in the approved Airplane Flight Manual or equivalent for operations under this part, and, if the airplane is certificated under §135.169(b) (4) or (5) with the